

January 10, 2012

Common Council President Richard A. Fontana Members of Common Council City of Buffalo Buffalo, NY 14202

Dear President Fontana and Members of the Common Council:

## RE: PEACE BRIDGE AND AIR QUALITY

We have had the opportunity to review the audio transcript of the December 20, 2011, Community Development Committee meeting, as well as, the resolution passed by the Common Council on December 13, 2011.

The Buffalo and Fort Erie Public Bridge Authority (PBA) concurs with many of the air quality concerns expressed and the PBA's past and future actions respond to those concerns. We thought it would be helpful to share with the Common Council the many improvements made by the PBA over the last six years that have dramatically improved the operation of the plaza and air quality in the neighborhood. The PBA has:

- Relocated the toll barrier (eight toll booths) from the U.S. plaza to Canada.
- Employed E-ZPass (only border crossing to do so) and three quarters of trucks utilize it, eliminating a toll stop for manual payment.
- Reconfigured and expanded the Canadian plaza, and modified access lanes, thereby virtually eliminating trucks from queuing across the bridge into the west side of Buffalo. It also drastically reduced the detour occurrences which forced trucks and cars onto the streets of Busti Avenue and Baird Avenue.
- Relocated the PBA administration offices to Canada freeing up space for Customs and Border Protection (CBP) to expand their secondary processing area to improve bus and car secondary processing, thereby reducing idling time for all vehicles in the plaza.
- Constructed three additional high-low truck inspection booths in the U.S. plaza. This
  75% increase in throughput capacity reduced the queuing of idling trucks waiting to be
  processed. The high-low nature of the booths also allows them to be used for car
  processing during down truck periods further increasing plaza efficiency on weekends
  and for Buffalo events.
- Together with CBP, installed an x-ray facility for trucks which allows many trucks to be scanned without referring them to a secondary area to idle and wait to be off-loaded.

- Contributed \$2.5 million dollars to the City of Buffalo as part of the plaza improvements to remove the three-lane Moore Drive from Front Park creating greater separation distance between bridge traffic and homes on Busti Avenue and to make other park improvements.
- Eliminated use of sand for winter control on plaza. This significantly reduces dust, an asthma trigger, from blowing into the neighborhood.
- Regularly wash and sweep the plaza and adjacent roads throughout the year to reduce dust.
- Founding member and continuing financial supporter of the "Spare-the-Air" coalition to reduce idling and diesel emissions.

The PBA also implemented one-way tolls into Canada thereby eliminating the commercial toll barrier prior to the U.S. inspection booths. Accordingly, there are no tolls/revenue collected from vehicles entering the U.S.

In addition to physical improvements undertaken by the PBA, there have been legislative changes implemented by Customs and Border protection (CBP) that have had a huge positive effect on border operations and dramatically reduced the idling of trucks.

- The U.S. Trade Act, since mid-2006 requires all trucks to arrive at the border prepared and having given pre-notification electronically of their arrival. Trucks that do not comply are returned to Canada. Previously trucks could arrive unprepared and simply park in the plaza idling, often times for hours, waiting to get their paperwork approved.
- The Free and Secure Trade (FAST) program was developed between Canada and the U.S. which provides expedited clearance for drivers, trucks and shipments pre-approved by both governments.

Common Council President Fontana correctly referenced the Environmental Protection Agency and the importance of implementing new diesel emission regulations. The impact has been dramatic:

- In 2006, a 97% reduction of sulfur in diesel fuel from 500ppm to 15ppm.
- In 2007, new standards for diesel engines requiring catalytic converters and particulate traps. Fully implemented in 2010.
- Result is a dramatic reduction in particulate matter (PM), non-methane hydrocarbons (NMHC), nitrous oxide (NOx) and trucks today being more than 90% cleaner than just five years ago.

• For the Peace Bridge, the real effect of these regulatory requirements is the air quality equivalent of eliminating more than 90% of the truck crossings, or put more succinctly, reducing the 2011 average daily truck crossings impact from 3,433 trucks to less than 350 per day.

There is simply no comparison between air quality today and what it was only a few years ago. The combination of PBA improvements, CBP requirements, and EPA regulations has resulted in astounding improvements.

During the meeting, reference was made to air quality testing. Without referring to PBA commissioned studies done for the Environmental Impact Study (EIS), we would like to share with you the results of studies commissioned or prepared in part by those opposed to the Peace Bridge:

## **CLARKSON UNIVERSITY**

This report (attached) was prepared by Clarkson University for the Fresh Air Coalition, an organization opposed to the Peace Bridge project.

The 2004 report concluded that particulate matter did not contravene EPA air quality standards:

"All of the measured values were less than the 24-hour National Ambient Air Quality Standard of 65 microgram per cubic meter as set forth by the U.S. EPA in the current volume of the Code of Federal Regulations (40 CFR 50)."

At the time the study was done the toll booths were still on the U.S. plaza and there was heavy construction equipment operating during that time. The relocation of tolls to Canada and completion of other plaza improvements which facilitated vehicle throughput resulted in air quality improvements.

## HEALTH EFFECTS INSTITUTE (HEI) AT HARVARD SCHOOL OF PUBLIC HEALTH

A very detailed research report (summary statement attached) was undertaken by HEI independently from July 2004 – January 2006. This study was independently reviewed by the HEI Health Review Committee. Due to the stringent review process the study was not released until 2011.

Not surprisingly the report did indicate that the Peace Bridge plaza did have some impact on elevated air emissions. However, there were some very noteworthy conclusions:

a) Mobile-source air toxics (MSAT's) which are truck and car emissions in the Peace Bridge area "were not high relative to levels measured at other U.S. locations."

- b) "In view of the relatively low elevation of MSAT pollutants and varying meteorologic condition at different times of the year the Committee did **not** agree with designating the Peace Bridge site as an unqualified hot spot."
- c) "Concentrations of all but a few polycyclic aromatic hydrocarbons (PAHs) were higher at the Hutchinson Chapel site when the site was downwind of the City of Buffalo (rather than downwind of the bridge) implying that regional combustion and urban infrastructure contributed more PAHs than the emission from the Peace Bridge traffic."
- d) "Concentrations of PM2.5 were relatively uniform at the three sites, indicating that PM2.5 levels in the study area may be dominated by regional air pollution patterns."
- e) "... elevated concentrations near the Peace Bridge were particularly dependent on wind direction: the neighborhood did not generally experience higher pollutant levels for the 55% of the time (40% in summer) when the wind was not blowing from the Peace Bridge plaza."
- f) The study acknowledged that the relocation of the tolls to Canada and changing traffic patterns and increased capacity for truck inspection "has likely altered the present day pattern of MSAT concentration in the study area relative to those reported in the study." It also acknowledged emissions from motor vehicles are changing as a result of new fuels and new emission-control technologies.

Just like the Clarkson University report, all this research work was undertaken *prior* to all the PBA plaza improvements being completed, *prior* to the CBP Trade Act requirements, and *prior* to the implementation of the EPA diesel regulations.

## CENTER FOR ASTHMA & ENVIRONMENTAL EXPOSURE

Dr. Jamson S. Lwebuga-Mukasa in November 2009 prepared a research paper (attached) entitled "Is Asthma An Ultrafine Particle Disease? – A Hypothesis." In the paper he references the effect of indoor air quality on asthma and states:

"In the U.S. and other developed countries individuals spend 90% of their time indoors. Ultrafine particles are produced when electrical heating elements or gas burners are turned on. The particulates reach concentrations that are five to ten times the concentrations that are measured at the roadside of busy truck routes."

Further, in 2004 Dr. Lwebuga-Mukasa made a presentation showing graphs demonstrating that even though truck traffic declined immediately post 9-11, emissions increased as a result of longer Customs inspection times and increased plaza congestion. This precisely makes the PBA's point that it is not truck volume that determines emissions but rather how efficiently that volume flows through the plaza. This has been confirmed by studies at other border crossings as well. President Obama and Prime Minister Harper in their recent border agreement also recognized this scientific fact when they stated that one of the key progress measures for border improvements, including at the Peace Bridge, is: "Reductions in environmental impact due to reduced border wait times will be measured in percentage decreases in tons of greenhouse gas emissions."

Councilmember Pridgen recounted his own health issue and how he believed living next to a traffic light and the idling and stop/starts may have contributed to it. We are pleased to report that today the FHWA filed in the Federal Register that it is rescinding the original 2001 Notice of Intent for the EIS that envisioned a much larger plaza. This will enable the PBA to proceed quickly with a series of smaller projects to facilitate the movement of traffic and thereby minimize idling and stops and starts, particularly for trucks. One of these projects is the elimination of the traffic lights at the intersection of Baird Drive and the plaza, and may also allow the elimination of the Busti Avenue, Porter Avenue traffic light.

Thank you for your consideration of this letter. We look forward to working with the Common Council as we develop plans to improve the functionality of the plaza for the benefit of the neighborhood and Western New York.

Yours truly,

Ron Rienas

General Manager

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cc:

Mayor Brown Senator Schumer Senator Gillibrand Congressman Higgins Congresswoman Hochul Congresswoman Slaughter State Senator Grisanti State Senator Kennedy Assemblyman Ryan PBA Board of Directors